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Bailey et al.

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(54) **PROCESS ANALYTIC INSTRUMENT WITH ENCAPSULATED FLAME-QUENCHING CONNECTION**

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(58) **Field of Classification Search**

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See application file for complete search history.

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(57) **ABSTRACT**

A process analytic instrument and tube carrier are provided. The process analytic instrument includes an analytic module having a plurality of inlets and configured to analyze a process gas. The tube carrier is coupled to the analytic module and has a shell defining an interior therein. A plurality of tubes terminates in the tube carrier. At least one of the tubes has an integral flame-quenching pathway and the interior of the shell proximate the integral flame-quenching pathway is filled with a solid.

18 Claims, 2 Drawing Sheets